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## DaimlerChrysler AG

## Patent claims

- A spray head for high-pressure jet applications, comprising a nozzle carrier and at least one exchangeable nozzle disposed in a bore of the nozzle carrier, which exchangeable nozzle is sealed along an annular surface against the wall of the bore,
- characterized in that the bore (1), at the region 10 against which the exchangeable nozzle (2) directly bears - hereinafter more simply referred to as the bore bottom (3) - is conically configured, in that the exchangeable nozzle (2), in the region of the bore bottom (3) - hereinafter more simply referred 15 to as the nozzle seat (4) - is likewise conically configured, and in that, in the installed, functional state, the nozzle seat (4), along an annular surface, in particular an annular line, bears directly and in a sealing manner against the 20 bore bottom (3).
  - 2. The spray head as claimed in claim 1, characterized in that the included angle of the bore bottom (3) is greater than the corresponding flank angle of the nozzle seat (4).
  - 3. The spray head as claimed in claim 2, characterized in that the flank angle differ from one another from the included angle by no more than about 5°, preferably by no more than about 3°, and especially preferably by no more than about 1°.
- 4. spray head claimed in claim as 2, characterized in that 35 the angle of flank the nozzle seat 58° (4) measures about and the

included angle of the bore bottom (3) measures about 60°.

- The head claimed in claim 5. spray as 1, characterized in that, for the positional locking 5 the exchangeable nozzle (2) in the nozzle carrier, the shape of the cross-sectional area of the nozzle seat (4) corresponds to the shape of the cross-sectional area of the bore bottom (3), 10 and in that the cross-sectional areas differ from a circular form.
- 6. The spray head as claimed in claim 5, characterized in that the cross-sectional areas
  15 have a circular form with circular arc segments spaced apart in parallel.
- 7. The spray head as claimed in claim 1, characterized in that the positional locking is effected on the high-pressure side.
- 8. claimed in The spray head as claim 1, characterized in that the exchangeable nozzle (2) is held in the installed state in the bore (1) by 25 means of an external holding screw (5), in that the holding screw (5) is screwed into the bore (1) of the nozzle carrier (6), in that the holding screw (5), at the region against which the exchangeable nozzle (2), particular, directly bears - hereinafter more 30 simply referred to as the screw bottom (7) - is conically configured, and in that the exchangeable nozzle (2), in the region of the screw bottom (7) - hereinafter more simply referred to as the screw seat (8) - is likewise of 35

correspondingly conical configuration.